

WHAT IS CLAIMED IS

5

1. An optical scanning device condensing a beam deflected by a light deflector, by a scanning and imaging lens toward a surface to be scanned to form a beam spot thereon, and scanning the surface to be
10 scanned by the beam spot,

wherein at least one lens of the scanning and imaging lens is configured so that a lens body thereof is held by a holding frame,

15 wherein a rib surface at an end in a longitudinal direction of the holding frame is inclined so that a ghost light generated as a result of the deflected beam being reflected by the end in the longitudinal direction of the holding frame is changed in light path in a sub-scan direction.

20

2. The device as claimed in claim 1, wherein
25 said rib surface is inclined as a result of being

rotated about an axis parallel to an optical axis of
said lens body.

5

3. An optical scanning device condensing a beam deflected by a light deflector, by a scanning and imaging lens toward a surface to be scanned to form a
beam spot thereon, and scanning the surface to be
scanned by the beam spot,

wherein at least one lens of the scanning and imaging lens is configured so that a lens body thereof is held by a holding frame,

wherein a rib surface at an end in a longitudinal direction of the holding frame is inclined so that a ghost light generated as a result of the deflected beam being reflected by the holding frame is turned outside of an effective writing range in a main scan direction.

25 4. The device as claimed in claim 3, wherein

said rib surface is inclined as a result of being rotated about an axis parallel to a sub-scan direction of the scanning and imaging lens.

5

5. An optical scanning device condensing a beam deflected by a light deflector, by a scanning and imaging lens toward a surface to be scanned to form a beam spot thereon, and scanning the surface to be scanned by the beam spot,

wherein at least one lens of the scanning and imaging lens is configured so that a lens body thereof 15 is held by a holding frame,

wherein a rib surface at an end in a longitudinal direction of the holding frame is curved so that a ghost light generated as a result of the deflected beam being reflected by the holding frame 20 forms a beam spot sufficiently spread on the surface to be scanned.

25

6. The device as claimed in claim 1, wherein
said lens body and holding frame are manufactured
through integral molding of a plastic material.

5

7. The device as claimed in claim 3, wherein
said lens body and holding frame are manufactured
10 through integral molding of a plastic material.

15 8. The device as claimed in claim 5, wherein
said lens body and holding frame are manufactured
through integral molding of a plastic material.

20

9. An image forming apparatus of performing
optical scanning of a photosensitive surface of a
photosensitive medium by an optical scanning device,
25 forming a latent image, and visualizing the latent image,

wherein the optical scanning device performing
the optical scanning of the photosensitive surface of
the photosensitive medium condenses the beam deflected
by a light deflector, by a scanning and imaging lens
5 toward a surface to be scanned as the photosensitive
surface to form a beam spot thereon, and scans the
surface to be scanned by the beam spot,

10 wherein at least one lens of the scanning and
imaging lens is configured so that a lens body thereof
is held by a holding frame,

15 wherein a rib surface at an end in a
longitudinal direction of the holding frame is inclined
so that a ghost light generated as a result of the
deflected beam being reflected by the end in the
longitudinal direction of the holding frame is changed
in light path in a sub-scan direction.

20

10. An image forming apparatus of performing
optical scanning of a photosensitive surface of a
photosensitive medium by an optical scanning device,
25 forming a latent image, and visualizing the latent image,

wherein the optical scanning device performing
the optical scanning of the photosensitive surface of
the photosensitive medium condenses the beam deflected
by a light deflector, by a scanning and imaging lens
5 toward a surface to be scanned as the photosensitive
surface to form a beam spot thereon, and scans the
surface to be scanned by the beam spot,

wherein at least one lens of the scanning and
imaging lens is configured so that a lens body thereof
10 is held by a holding frame,

wherein a rib surface at an end in a
longitudinal direction of the holding frame is inclined
so that a ghost light generated as a result of the
deflected beam being reflected by the holding frame is
15 turned outside of an effective writing range in a main
scan direction.

20

11. An image forming apparatus of performing
optical scanning of a photosensitive surface of a
photosensitive medium by an optical scanning device,
forming a latent image, and visualizing the latent image,
25 wherein the optical scanning device performing

the optical scanning of the photosensitive surface of
the photosensitive medium condenses the beam deflected
by a light deflector, by a scanning and imaging lens
toward a surface to be scanned as the photosensitive
5 surface to form a beam spot thereon, and scans the
surface to be scanned by the beam spot,

wherein at least one lens of the scanning and
imaging lens is configured so that a lens body thereof
is held by a holding frame,

10 wherein a rib surface at an end in a
longitudinal direction of the holding frame is curved
so that a ghost light generated as a result of the
deflected beam being reflected by the holding frame
forms a beam spot sufficiently spread on the surface to
15 be scanned.

20 12. An optical scanning method of condensing
a beam deflected by a light deflector, by a scanning and
imaging lens toward a surface to be scanned to form a
beam spot thereon, and scanning the surface to be
scanned by the beam spot,

25 wherein at least one lens of the scanning and

imaging lens is configured so that a lens body thereof
is held by a holding frame,

wherein a rib surface at an end in a
longitudinal direction of the holding frame is inclined
5 so that a ghost light generated as a result of the
deflected beam being reflected by the end in the
longitudinal direction of the holding frame is changed
in light path in a sub-scan direction.

10

13. An optical scanning method of condensing
a beam deflected by a light deflector, by a scanning and
15 imaging lens toward a surface to be scanned to form a
beam spot thereon, and scanning the surface to be
scanned by the beam spot,

wherein at least one lens of the scanning and
imaging lens is configured so that a lens body thereof
20 is held by a holding frame,

wherein a rib surface at an end in a
longitudinal direction of the holding frame is inclined
so that a ghost light generated as a result of the
deflected beam being reflected by the holding frame is
25 turned outside of an effective writing range in a main

scan direction.

5

14. An optical scanning method of condensing
a beam deflected by a light deflector, by a scanning and
imaging lens toward a surface to be scanned to form a
beam spot thereon, and scanning the surface to be
scanned by the beam spot,

wherein at least one lens of the scanning and
imaging lens is configured so that a lens body thereof
is held by a holding frame,

wherein a rib surface at an end in a
15 longitudinal direction of the holding frame is curved
so that a ghost light generated as a result of the
deflected beam being reflected by the holding frame
forms a beam spot sufficiently spread on the surface to
be scanned.

20

15. An optical scanning device condensing a
25 beam deflected by light deflecting means, by scanning

and imaging means toward a surface to be scanned to form a beam spot thereon, and scanning the surface to be scanned by the beam spot,

wherein at least one lens of the scanning and
5 imaging means is configured so that a lens body thereof
is held by a holding frame,

wherein a rib surface at an end in a
longitudinal direction of the holding frame is inclined
so that a ghost light generated as a result of the
10 deflected beam being reflected by the end in the
longitudinal direction of the holding frame is changed
in light path in a sub-scan direction.

15

16. An optical scanning device condensing a
beam deflected by light deflecting means, by scanning
and imaging means toward a surface to be scanned to form
20 a beam spot thereon, and scanning the surface to be
scanned by the beam spot,

wherein at least one lens of the scanning and
imaging means is configured so that a lens body thereof
is held by a holding frame,

25 wherein a rib surface at an end in a

longitudinal direction of the holding frame is inclined so that a ghost light generated as a result of the deflected beam being reflected by the holding frame is turned outside of an effective writing range in a main
5 scan direction.

10 17. An optical scanning device condensing a beam deflected by light deflecting means, by scanning and imaging means toward a surface to be scanned to form a beam spot thereon, and scanning the surface to be scanned by the beam spot,

15 wherein at least one lens of the scanning and imaging means is configured so that a lens body thereof is held by a holding frame,

20 wherein a rib surface at an end in a longitudinal direction of the holding frame is curved so that a ghost light generated as a result of the deflected beam being reflected by the holding frame forms a beam spot sufficiently spread on the surface to be scanned.